

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

AUGUST 1, 1937



Aesculus parviflora

**Selling Landscape Planting by Mail
Direct-Mail Advertising
Native Plants of Garden Value
Quarantine on Pests, Not Plants**

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

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QUARANTINE, NOT EMBARGO

No one at the national capital has shown a greater disposition to confer face to face with commercial horticultural interests and discuss their problems frankly with a view to practical solution than Lee A. Strong, chief of the bureau of entomology and plant quarantine of the United States Department of Agriculture. His address last month at the nurserymen's convention at Chicago was valuable on that account. Besides his comments on current insect pests of importance and on the desirability of uniformity in state quarantines, his exposition of quarantine 37 was especially noteworthy.

The original administration of quarantine 37 was based on the exclusion of plants available in the United States, on the assumption that the more plants that could be shut out the more insects would be excluded. That has given way to a common-sense attitude, with the basis of quarantine administration "the prevention of pest movement and not the prevention of plant movement."

To call this a more liberal interpretation depends upon the point of view. It is rather a more strict interpretation, imposing regulations in conformity with the original act of Congress, whereas the original administration was really the more liberal in construing the law in an exceedingly broad way.

This changing view in respect to quarantine 37 will affect many branches of the commercial horticultural industry, and on that account

The Mirror of the Trade

the address of Lee A. Strong at Chicago bears careful study. It is published in full in this issue, with the hope that every reader will take the opportunity to inform himself on this important subject.

ÆSCULUS PARVIFLORA.

As a specimen for a large lawn area, the dwarf buckeye or dwarf horse-chestnut, whichever you prefer to call it, is outstanding. It is out of place, though, in restricted areas, for it spreads to form clumps four to six feet high and two to three times as broad. *Æsculus parviflora* may reach a height of ten to twelve feet, though it is more frequently seen half that high. Another common name, and a very appropriate one too, is bottlebrush buckeye. One look at the inflorescence shown in the front cover illustration makes the name self-explanatory.

The feathery appearance of the flower spikes is due to the protruding pinkish stamens, which are about twice the length of the white petals. The dwarf buckeye is the latest of the group to bloom, the showy terminal spikes maturing during July and August when they are much appreciated. The palmately divided leaves have five to seven leaflets.

Lack of hardiness in the northern states limits the use of this shrub somewhat, it being placed in zone 4 in Taylor's chart and in zone 5 in Rehder's. Roughly, the northern limit of its hardiness, then, is Boston and New York on the east coast, southeastern Pennsylvania, southern Ohio, central Kentucky and southern Missouri, Kansas, Colorado, Utah and Nevada, swinging north up the west coast to British Columbia. Fine specimens were noted recently in a collection of woody material at New Brunswick, N. J., and it is possible that with careful attention the shrub could be used somewhat north of the range indicated.

The dwarf horse-chestnut is not particular as to its rooting medium, growing satisfactorily in nearly all ordinary garden soils. Mound layering and the use of root cuttings are the usual methods of propagation, though stratified seeds can also be employed. It is hoped that a hardier

form of this attractive specimen shrub will some day be found to help extend its usefulness.

BUSINESS OUTLOOK GOOD.

Sales of nursery stock depend so much on the prosperity of industry generally that the current attention to labor disturbances and political unsettlement, as well as the probable effects of higher taxes, causes nurserymen to wonder how much improvement should be expected in the months ahead and to what extent they should plan for it.

Newspaper headlines are meant to be spectacular and often their message overshadows the important facts notwithstanding. So conservative a service as Babson's Reports, Inc., calls attention to some indisputable facts, that actually are more important than politics and strikes.

Farmers will average an income \$24,000,000 more per week this year than last, fifteen per cent ahead of last year and the best since 1929.

Factory workers will make \$50,000,000 more per week this year than last, thirty per cent ahead of last year and the best since 1929.

Dividend checks will be about \$10,000,000 a week greater than last year, thirteen per cent ahead of last year and the best since 1931.

Automobile assemblies for 1937 will equal, if not surpass, 1929. Railroad carloadings are the highest since 1930. Steel activity, in spite of strikes, is operating at eighty-five per cent of capacity, a boom mark for steel. Electric power output is hitting new highs every week. Even building, the worst laggard of all, is forty per cent ahead of last year.

Under the circumstances, with greater sales recorded in other lines and more money being paid out to the people of the country, sales of nursery stock should improve as well. Business is basically sound, and as we get out of our systems the jitters left by the recent depression, it will go ahead still more rapidly.

LANDSCAPE planting should be arranged with plenty of open space so that the plants may be seen and may develop naturally and healthfully.

AMERICAN NURSERYMAN

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No. 3

Selling Landscape Planting by Mail

Direct-Mail Advertising Used by Nurserymen, Displayed at A. A. N. Convention, Points Way to Increased Sales Promotion in This Field

The innovation at the A. A. N. convention this year, a display of nurserymen's retail advertising, was studied so thoroughly by members in the meeting hall that many expressed the hope it may be continued and amplified at succeeding gatherings. Six boards, each 3x6 feet, were covered with mailing pieces, advertisements, form letters and other forms of direct-mail selling, as well as a number of handsome catalogues put out by firms for their landscape departments. The forceful remarks of the three speakers on merchandising and sales management in the afternoon devoted to that topic enhanced the interest in the display.

Preparation of the display revealed how scanty are the efforts of nurserymen generally in this direction. Letters to prominent firms throughout the country, asking for specimens of their sales literature, brought expressions of interest in the exhibit and a hope to embark on such advertising, but the number of nurserymen who do anything at all in the way of mail selling, except to send out a catalogue, proved astonishingly few. And not more than a handful in the country make systematic mailings each season in any number.

The mailing pieces were confined almost entirely to the sale of landscape service. A number of nurserymen remarked that, now that they had seen how it was done, they would like to do something similar themselves. And as there should be a great many more nurserymen of like mind throughout the country, a description of some of the exhibits is given briefly here, and more will follow in subsequent issues.

Outstanding in the development of direct-mail pieces to sell landscape service is Swain Nelson & Sons Co., Glenview, Ill. Close to the select residential suburbs along the lake north of Chicago, this old nursery firm sends handsome reminders several times a year to owners of fine homes. Nurserymen who heard the speaker at the Illinois meeting last year tell about the letters that built a small business in oriental rugs into a big one were interested in seeing the idea applied to nursery products. A 4-page circular, somewhat smaller than letterhead size, carried in large and pleasing type a series of stories about famous gardens. The first was the story of the Assassins garden, laid in Persia in the eleventh century. The introduction contained this explanatory paragraph:

The story of the Assassins garden is the first of a series of stories which will come to you at intervals. Beautiful gardens have always been a fitting background for romance; therefore each number of the series will attempt to convey a word picture of some famous garden in various parts of the world—gardens into whose history is woven some out-of-the-ordinary, dramatic human interest story.

At the conclusion of the story was the sales message, which read as follows:

But the story of the Assassins garden goes on through the ages, and the poets continue to sing of its glory; with each succeeding generation new gardens are created to make possible a fuller and more beautiful life.

Beauty in your outdoor home does not necessitate an elaborate or expensive planting, but more often interesting and unusual surroundings are dependent on carefully planned simplicity.

The inclosed card is for your convenience. Mail it today.

The succeeding mailing pieces bore no introduction or sales message,

though the return mailing card was inclosed. One told the story of "The Walled Garden of the Bayou," and another told about "The Phantom Garden of Catherine the Great." Accompanying pictures, illustrative of the stories, were printed separately on smaller sheets folded over the circular—another means of impelling attention.

A recent handsome piece was a letter headed "Will You Accept a Beautiful Sketch of Your Home?" and the opening paragraph read:

In this sketch, one or more shade trees will be added to your present landscape. In this matter we will attempt to make captive some of the beauty that a Swain Nelson guaranteed shade tree can bring to your property.

The letter was folded over a large 4-page circular of letterhead size, the front carrying a large green and black picture of a grove of shade trees and the back bearing a message about having trees inspected for winter damage, with several typical views of tree repair work, while inside was a reproduction, on the one hand, of a tree sketch such as the customer might expect and, on the right-hand side, a pair of pictures, one taken before a couple of big shade trees were planted adjacent to a fine home, and the other after. The message pointed to the return mailing card, ready to be checked and signed with the prospect's name and address.

Mailing pieces of this firm are each different in shape, size and character, though all boast handsome illustrations and typography. Each carries a definite message, so that the prospect feels he is told about something new. The modern garden, with smooth slate dance floor, outdoor fireplace, garden

furniture and mosquito lamp, is the subject of one. A folder entitled "New Ideas in Landscaping" carried inside a dozen different pictures, each handsomely printed on an individual sheet, with a short explanation printed on the back. A different garden feature was shown in each picture.

Fall planting is constantly emphasized, and each year the message is carried to prospects in a new and different form. The printed portion is brief, and much use is made of illustrations exemplifying the firm's work. So extensive was the array of Swain Nelson mailing pieces, all expertly designed and handsomely printed, that much more might be written if space permitted.

Another firm well represented by mailing pieces was the W. A. Natorp Co., Cincinnati, O. One was a large folder, on stiff paper fastened with a sticker and sent out under permit, not in an envelope. This was devoted almost entirely to feeding and spraying trees, though mention was made of the types of landscape service the company offers. For mailing in a small envelope was prepared an 8-page folder on moving big trees, and illustrated with pictures of winter operations and the results. In a handsome stiff green cover, the booklet "Natorp Knows Nature" carried twelve pages, 6½x10 inches, of landscape features, each page carrying three views and a few remarks on, for example, rustic gardens, rockeries, foundation plantings, pools, steps, tree-moving and waterfalls.

The "Natorp Garden Book," as the retail catalogue is called, devotes not a page or so, but more than a dozen to landscape work and pictures of it, preceding the descriptive price list. Worth notice was the large tag carrying gardening instructions attached to each order sent out.

A series of three mailing pieces makes up the current program of the Bay State Nurseries, North Abington, Mass. One is a 4-page folder of letter-head size asking the question, "Are You Missing the Joys of a Garden Home?" and carrying a score of small but clearly detailed illustrations of plantings, and emphasizing modernization as applicable to the garden as much as to the house itself. This is followed by a smaller folder with but a single illustration, entitled "Let Us Plan and Plant Your Garden," and pointing out the advantages and the

facilities of the company's landscape organization. The third piece is a booklet of views, "In the Garden Home," consisting of twenty pages, 8x10 inches, showing views of various members of the family enjoying different features of the garden. Unique in including living figures to emphasize the enjoyment of the garden, this book was one of the outstanding pieces.

Illustrated 4-page circulars on moving big trees were contributed by the Greening Nursery Co., Monroe, Mich., and the Millane Nurseries & Tree Expert Co., Cromwell, Conn. Of quite different character, both were effective in type.

From the California Nursery Co., Niles, Cal., were besides proofs of several newspaper and magazine advertisements, four different form letters, two directed to the man whose new home is under construction, one directed to an institution about landscaping its grounds and one addressed to the customer whose home has just been planted, giving instructions as to sprinkling and feeding the plants and offering the further services of the organization.

It was evident that the usual practice of firms is to include information about the landscape service of the nursery in the retail catalogue, usually handsome and well printed. Some firms issue separate booklets, bordering on catalogue size, elaborate in presentation and extraordinarily handsome in design and printing, such as one might regard as most fitting to be sent to a prospect whose landscape order may well run into the hundreds or even thousands of dollars. The Outpost Nurseries, Ridgefield, Conn., has a striking cover of black and white on its 24-page booklet of 9x12 inches, containing a great many pictures of trees and shrubs of various sizes, digging, moving and planting operations and views of clients' properties.

Also in a black cover, but with a sketch in colors on front and back, is the 12-page booklet, "Four Seasons," issued by the Plainfield Nursery, Inc., Scotch Plains, N. J. The double-page picture of a rock garden and pool in natural colors in the center of the booklet is only tamely described as exquisitely beautiful. The other illustrations are likewise of fine character, and the book is undoubtedly one of the handsomest issued by nurserymen.

Issued in previous seasons, similar booklets were shown carrying messages

AMERICAN NURSERYMAN

about landscape service and illustrations of instructive character, including "A Message from Little Tree Farms, Landscaping and Forestry Service, Framingham, Mass.," and "An Invitation to You" from the White Elm Nursery, Hartland, Wis.

The foregoing presents some of the outstanding exhibits in the display, though there were many more, which will be the subject of further comment, and it may be added that the editor will welcome the receipt of any pieces of direct-mail advertising or other retail sales literature that readers are using to develop customers for their landscape service.

KANSAS STATE TREE.

The Kansas legislature has selected as the official state tree the cottonwood, botanically indicated as *Populus canadensis*. The cottonwood has its defects, no one can deny. But, as a newspaper editorial writer pointed out: "The cottonwood served Kansas at a time in its pioneer history when it needed such service. Easy to root and friendly to almost any soil, it gave shade and timber and fuel and even fodder to the early-comers, and through all of the history of fitting the state with its sturdy population it has stood by handily and companionably. It sheltered the pioneers as it provided windbreaks against the winds of winter, and if it drank a bit more than its share of the none-too-plentiful supply of water, it repaid its keep in many ways."

TEST OVER 2,500 FRUITS.

For the past fifty years one of the major efforts of the fruit specialists at the New York agricultural experiment station has been the testing of every variety of the hardy fruits that they can obtain in an effort to find superior sorts. Among the more than 2,500 varieties now fruiting on the station grounds are approximately 550 apple varieties, over 200 pears, about 175 cherries, more than 300 peaches, some 325 plums, 375 grapes, well over a hundred each of raspberries and strawberries, and a great variety of the other small fruits. In addition to these more or less standard varieties of fruit, the station is testing thousands of seedlings resulting from crosses made in its orchards, vineyards and small fruit plantations.

Direct-Mail Advertising

Regular Promotion of Retail Sales, Now Often Neglected, Important To Nurserymen, A. A. N. Convention Told — By Homer J. Buckley

There is no retail nursery business, large or small, which cannot profitably use advertising and promotion regularly every week to produce actual sales, and no retail nursery business can make the most of its sales opportunities without advertising, particularly direct-mail advertising.

Business is a very human thing. Sales come from customers—from men and women—and the business that you get and keep on getting comes from those customers you serve well. It is the satisfied customer in every business that makes the sales required both for continuance in business and for growth. Building sales volume is merely a matter of doing simple, and generally inexpensive, things well. Find out what the average customer is worth to your business and how long he or she remains a customer.

Right here I should like to emphasize that direct mail is not, and should not be, in competition with newspapers or other advertising media. Newspaper advertising is mass selling—broadcasting to the entire community. Direct advertising is selective—to carefully hand-picked groups of customers or prospective customers, who are logical buyers of the particular type, price and quality of merchandise offered. Direct advertising should never be used to supplant or take the place of newspaper advertising. Whenever it is tried it fails.

Dividing the Budget.

What amount of the retailer's advertising budget should be allocated for direct mail and what amount for newspapers depend on the location, type and size of the retail store.

Large department and dry goods stores located in downtown central buying districts should allocate sixty to eighty per cent of the advertising budget in newspapers and twenty to forty per cent in direct-mail sales promotion.

Specialty shops located similarly should distribute the budget on a sixty-five per cent and thirty-five per cent basis, and retail stores in neigh-

borhood and community locations on a fifty-fifty basis.

There will be variation in the latter group, of course, depending on the particular type of store and unusual conditions that may exist, especially where the retail store has only a weekly newspaper to depend on for general advertising.

To be specific, you retailers can use direct advertising in your business profitably, to build up more sales from your present customers through timely suggestions and offerings; to overcome the high mortality among your old customers, who drift away through neglect or lack of acknowledgment that their business is appreciated; to prevent competition inroads on your regular customers, customers who are induced to buy elsewhere because of convenience or solicitation of others; to promote sales of out-of-the-ordinary plants and shrubbery which customers do not as a rule buy, because of habit, custom or tradition in buying elsewhere; to give your customers advance notice of special items on hand or being received; to promote the sale of regular items for special events; to develop new charge accounts among prospects not now buying from you; to develop the occasional buyer into a regular patron of your nursery; to reduce and ferret out dissatisfied customers who otherwise would not make known their grievances, for seventy-five per cent of the people who quit buying from any retailer because of dissatisfaction, real or imaginary, never complain, and to add twenty to twenty-five per cent new customers to your lists, from desirable, logical prospects, each year, to take the place of the normal fifteen per cent loss each year, through deaths, removals or conditions beyond your control.

Every nurseryman should develop and maintain two general lists—customers and prospects. These should be broken down into three basic groups by classes: Well-to-do quality buyers of the club member, social register type; middle-class buyers of medium to high-priced stock, and the third group which buys popular-

priced goods and sales merchandise. If these lists are maintained on cards, information from sales tickets and ledgers should be tabulated, so as to provide an intelligent analysis of the lists. The same division should be maintained on the prospect lists, based on income, social standing, financial worth, etc.

Mailing Lists Important.

The importance of a good mailing list cannot be overstressed. A good list is made up of names of actual customers or known possible buyers. What it costs becomes secondary, for results largely depend upon its quality. It is not the number of names, but the buying power of the people on the list that makes it valuable to you.

To show what can be done under intelligent planning, one well known Chicago retailer, on a single mailing to 3,000 customers and prospects for custom shirts, booked 182 orders within thirty days, averaging \$15 per order, totaling \$2,730 in sales, at a cost of \$196. It was a simple letter mailing, but it was timed right and the list was of quality names of known buyers.

Make it a point to select your prospect list with greatest care from reliable sources. In this there should be no compromise. Good lists will justify their slightly higher cost of procuring and maintaining many times over.

When mailing to several lists avoid duplication. Results are often jeopardized when the recipient—prospect or customer—receives two or more identical pieces of literature. The impression created is unfavorable to you. Moreover, you waste both the postage and the message.

There are many widely used forms of direct mail for the retailer—letters, folders, circulars, broadsides, inclosures, illustrated letters, etc.; the purpose determines the form in each case. Always the message should be interesting, enthusiastic and persuasive, complete and convincing in each minute detail of illustration and text. Only by including these vitally es-

sential elements can your message accomplish what you intend for it. The task of preparation belongs to those who know how, from long experience in highly specialized work.

Customer Control.

Of the ten ways pointed out for the retailer to employ direct-mail advertising profitably, several have specific relation to "customer control," which now has become more or less well understood as new terminology in the language of retail store operations.

I have always advocated a study of customer accounts by retailers. There is a gold mine of opportunities buried in the old ledgers and accounts that have drifted away through neglect. There is no other way to revive and bring them back into the fold—these customers—than through an active, well organized direct-mail follow-up.

Third-class mailings are often employed when they are a criminal waste of the advertiser's money. Some advertisers depreciate the value of letters and will not use them in a campaign, yet the letter is the ace in the deck of a series of direct mailings, if judiciously employed. I say "judiciously employed" advisedly, for the letter is more often abused than otherwise.

As an example of what can be accomplished through such a follow-up, let me give you here the first of a series of letters reviving old accounts. This letter was mailed by a merchant located in a town of 25,000 population to a list of people who, though once good customers, had not purchased from him for at least twelve months. There were 730 replies, either purchases or personal visits.

"Dear Sir:

"If one of these days you should discover that a mighty good friend of yours, to whom you had given the best you had in the way of friendship, courtesy and understanding, had suddenly stopped visiting you without apparent cause, you'd want to know why, wouldn't you?

"This business, which has taken me twenty years to make successful and highly esteemed, is the biggest thing in my life. My customers, in every sense of the word, are my best friends, for they make my success a reality. You are one of them. I have honestly tried to give you the best I had in every possible way.

"It is about a year now since you have been in this store. Being human, it is quite possible that I have done something or sold you something which did not thoroughly satisfy you. If that is the case, won't you come in and tell me about it, just as one good fellow to another? Even now, if you weren't satisfied with that last purchase I will make things right in the way that will suit you.

"This is no suggestion that you need to buy anything. I would appreciate having an opportunity of talking it over.

"Yours very truly,"

There is nothing unusual about the letter except perhaps just one thing. It brought amazing returns.

Letters Are Difficult.

The use of letters for producing sales from present customers and from prospects, and how they can be successfully used, is shown in the following example:

A New York art dealer, who specialized in fancy vases, had a clientele composed of rich people. Naturally, his experience had taught him that people in the millionaire or near-millionaire class are besieged with requests to buy things.

After two years experimenting with various types of direct-mail advertising, he decided in favor of letters, aided and abetted now and then by the best piece of printed literature money could purchase.

Here is one of the letters. Because it is so typical of the kind he used, and since it brought eighty-five people out of a possible 250 into his store, I quote it for you:

"Dear Mrs. Vanderwater:

"Late Tuesday afternoon a shipment of twenty-five of the most beautiful and, in my opinion, the most difficult to obtain, Chinese cloisonné vases reached us from Shanghai, China.

"As an individual who has shown a preference for similar objets d'art, I thought you would want to see them before I placed them for sale to the general public.

"Can you come in this week, preferably before Saturday?"

Years of experience in writing to people who have much greater than average buying power have taught this man the wisdom of saying in

three paragraphs what he might have said in fourteen.

Direct-mail copy, be it for a mail-order piece or designed to parallel personal selling to get an inquiry, is the most difficult kind of advertising copy to write. Men who are versatile copy space fillers for general publicity are not, as a rule, successful direct-mail copy men. The whole approach is different. A man of this type is invariably skilled in writing to the mass reader mind, but when it comes to the direct specific appeals, he falls flat.

I know men who are positive geniuses in writing newspaper or magazine copy, but who are miserable failures at writing a sales letter, folder or other mailing piece, and the exception to this is rare. Of course, there are men who can and do write mass appeal copy for direct mail, and this literature I classify without hesitation as waste. Unfortunately, there is much of it going out all the time.

The specific requirements in the preparation of successful direct-mail advertising are training and experience, combined with a thorough understanding of the product, its merchandising angles and competition; the lists to be covered and most effective method of classifying them according to buying habits, etc.; the type of copy of direct and specific appeal to each group at the point of purchase; the mechanics of direct-mail pieces and their specific application to each class, and the follow-up, when, where and how employed.

In other words, direct-mail advertising today calls for a high order of application, an understanding of fundamentals and practical operation in mastering essential details if waste is to be eliminated.

BRONZE BIRCH BORER.

The bronze birch borer, which commonly kills first the tops and then the lower part of birch trees, usually attacks trees which have been weakened by malnutrition and by drought; a vigorously growing birch is rarely injured seriously. The birch attains its most satisfactory development in moist, rich soil. Under ordinary lawn conditions, a luxuriant sod may be produced without giving the birch trees proper food and moisture. By feeding the trees to restore vigorous growth, borer infestations can be checked and frequently overcome.

Native Plants of Garden Value

Thirteenth in Series of Articles on Neglected Opportunities for Nurserymen in Native Material—By C. W. Wood

The species of *ipomœa*, the morning-glories, are mostly tropical and, of course, find no place in an account of hardy plants. Two hardy species and one that is fairly hardy have, however, been in my garden; all three of these possessed garden value, although one, *Ipomœa pandurata*, is apt to become a nuisance. The best and the hardiest of the lot is *I. leptophylla*, the bush moon-flower of the plains states from Wyoming and Nebraska south to Texas. This plant has an interesting history, too long to recount now. It also has much to recommend it to the gardener, especially one who is laboring on a dry soil. It grows from an immense tuberous root, specimens of which have been known to weigh 100 pounds and measure four feet in length. Such size as these large figures indicate need not worry the plant grower, however, for it takes scores of years to produce such a root, and the plant is not moved easily, according to my experience, after it attains much age. It is the large root that makes it possible for the plant to get along on an extremely small amount of moisture, one report stating that it thrives where rain has not fallen for three years. The real beauty of the plant comes in late summer (from August onward in northern Michigan) when the 3-foot bushes are covered with deep rose morning-glories as much as three inches across.

Of somewhat similar habit, including the large tuberous root, is *I. longifolia*. In this case the leaves are long (linear-lanceolate) as the specific name indicates, and the flowers are white. It has proved too tender for my climate, but would no doubt be able to stand the winters from Illinois southward.

The only other hardy morning-glory of garden value that I have found is *I. pandurata*, the man-of-the-earth of eastern United States. This plant has to be used with discretion, however, for it easily becomes troublesome and, on that account, is perhaps best left alone. It has value, though, especially for

clothing dry, difficult places if provision is made to keep it in bounds. It grows from a long and large root, which may weigh as much as twenty pounds, producing stems as long as ten feet and an immense number of 2 to 4-inch wide white flowers with purple throats.

The first two are perhaps best grown from seeds, which germinate readily if the seeds are soaked in water for a day or two before planting, but the plants grow slowly in the north. *I. pandurata* is perhaps best propagated from root cuttings, though it too may be grown from seeds. They all need a dry, sunny situation.

Isopyrum.

The only native *isopyrum* of my acquaintance is *I. biternatum*, and it seems unknown in gardens. No doubt its uses are limited, principally because of its need for a moist, shady situation, but its graceful biternately compound leaves and 2 to 3-lobed leaflets are truly ornamental under the conditions named. The flowers are without petals, the sepals being white and petal-like, and are of little account from a gardener's standpoint, but the lovely foliage is sure to please. *Isopyrum* may be grown from seeds, though, like many of the *ranunculaceæ*, the seeds are slow to germinate and give more satisfactory results if sown in autumn in an outdoor frame. It may be propagated by division, which is perhaps best done in fall.

Jeffersonia.

Few woodland plants have greater charm over so long a period as the twinleaf, or *jeffersonia*. From the time it sends up its reddish purple shoots in early spring through the unfurling of its twin leaves, with the leaves as well as the stems carrying intriguing shades of purple, to the opening of the normally 8-petaled white flowers and the formation of the picturesque seed capsules, the plant is a study in beauty and charm. It is not spectacular, to be sure, but it is certainly intriguing and beyond a doubt an ornament for a woodsy

spot. Its culture is indicated by the term "woodland plant" and it is best grown from fall-sown seeds.

Krigia.

Krigia is a small group of northern composites, none of which seems to be known to any extent in gardens. Perhaps they are not to be numbered among the really important flower garden subjects, yet they would undoubtedly find a place in many a planting if gardeners knew they existed. The one found commonly in dry fields and open places, *K. virginica* of the botanists, is of easiest culture, growing naturally in the poorest and driest soil, but, unfortunately for the hardy plant grower, it is a winter annual. Two other widely distributed *krigias*, *K. amplexicaulis* in the north and *K. Dandelion* in the south, need more moisture to do well. The first of these will grow twelve inches high under good treatment, bearing 2-inch heads of orange yellow flowers from May until late summer. The other is a slightly lower plant and has inch-wide heads of yellow flowers from April until July.

It is my opinion that the best of these dandelion-like plants (the appellation is not to be taken in a derogatory manner, because they never become weedy like dandelions) is the one known as *K. montana*, which was formerly considered a variety of *K. Dandelion*. It is a small plant, usually about six inches high when in flower, that is found in rocky crevices in the Allegheny mountains. It has the same kind of foliage as *K. Dandelion*, which varies from entire to pinnatifid, and the flower heads are smaller. It is easy to grow from seeds, does well in almost any situation and blooms over a long period, usually from late March into July.

Lathyrus.

The genus *lathyrus* contains a number of native perennial peas, including several good garden kinds. They are not likely to become favorites in nurseries, however, for many of them are difficult to move after

they once become established. Two species will be mentioned at this time, however, with the hope that they may help some local growers who can put them in their customers' hands while the plants are small. The first of these, *Lathyrus maritimus*, the seaside pea, with decumbent stems up to two feet in length and purplish flowers from May until August, is a good plant for dry, sandy slopes in sun. I have used it in dry, difficult situations in a large rock garden and have found it a satisfactory plant to cover spaces where little else would grow. Care must be taken, however, to get it far away from more delicate plants because its creeping rootstock may carry it farther than one thinks possible. On the other hand, the second of our perennial peas, *L. palustris*, is a moisture lover, being found in almost bog-like conditions in nature. It has rather erect stems up to two feet in length and bears its purplish flowers from June until August. It makes an admirable bog plant and should not be overlooked by growers of that kind of material. All the species may be grown from seeds planted as early in spring as the work can be done, and the first may be propagated by dividing the creeping rootstocks.

Lepachys.

All three perennial species of *lepachys* are good garden plants and deserve far more attention than they have ever received on this side of the Atlantic. *Lepachys columnaris* in its variety *pulcherrima* is a particularly striking plant, having a color, brownish purple or mahogany, found in no other hardy plant that comes to mind at present and a form, much-reflexed petals surrounding a thimble-like cone, quite unique in arrangement of floral parts. This is the obelisk flower, *Obeliscaria pulcherrima*, of the gardens and catalogues of Europe, where it is made much of, especially as a bedding plant. In fact, European authors speak of the plant as being tender to cold; even in England gardeners usually treat it as an annual. No doubt this condition has come about through the use of material from the southern part of the plant's range (it is native to the prairies and plains from Canada to Texas), which has never been hardy in my garden,

while that from the north is able to stand at least as low as 40 degrees below zero. From a tuft of deeply cleft leaves, stems rise to a height of two feet or so, bearing many flowers, solitary at the end of the branches. These flowers are yellow in the case of the type, brownish purple and yellow or entirely brownish purple in variety *pulcherrima* and almost black in variety *totus purpureus*. My choice of the entire lot is the brownish purple form of variety *pulcherrima*. This is a plant that should sell readily in a neighborhood nursery where plants are chosen by sight when they are in bloom. It is also a good cut flower, with its striking color, long-lasting qualities in water and its long graceful stems clothed in delicately cut leaves. For cut flower purposes the *lepachys* should be given a fertile soil, where it may grow as high as three feet or even higher, or it may be kept close to rock garden height by growing it in a lean soil. It comes readily from seeds at almost any time of the year; some writers recommend starting them early under glass to secure bloom the first year, but that is scarcely advisable here in the north.

L. pinnata is the common cone-flower of the middle west, taller-growing (from three to six feet depending upon fertility and moisture), and the yellow ray petals are larger and longer. All the kinds mentioned are for a sunny, well drained spot and require little care after they become established.

BLUEBERRIES FOR SOUTH.

To get a blueberry bush that in warmer states will bear fruit of large size and high quality, United States Department of Agriculture workers are crossing the northern highbush blueberry with selected plants of the highbush blueberry growing wild in southern states.

Northern blueberry plants require a thorough winter chilling to start them into normal growth. They are not suited for commercial plantations where the winters are normally mild.

The late Dr. Frederick V. Coville proved by experiment that the northern blueberry needs chilling for proper development. He made a small opening in one side of his greenhouse and arranged a potted

blueberry so that one branch passed out of the hole and was thoroughly chilled during the winter. This branch was the only one on the plant which grew normally in the spring. This winter chilling releases an enzyme which acts on the starch stored in the stems of the plant, converting it to sugars which become available food for spring growth.

A large part of the blueberries produced from commercial varieties of the northern highbush blueberry are grown in New Jersey, where winter chilling is sufficient to insure a good crop. Some northern highbush blueberries are grown within thirty-five miles of Wilmington, N. C., although an occasional abnormally warm winter results in a short crop.

Crossing of the southern highbush blueberry with the commercial northern highbush varieties has produced some promising hybrids, but further crosses will be made and tested before commercial plants can be produced and distributed.

BEECH LEAF DISCOLORATION.

Velvety greenish yellow or brown patches sometimes found on beech leaves, especially on low sprouts or low-hanging branches, are caused by an extremely tiny plant mite, approximately one-hundredth of an inch in length and barely visible with a good hand magnifier and under favorable light conditions. A badly affected leaf is easily recognized by the lighter green depressed areas between the veins on the upper surface and the elevated, smooth mealy-appearing spots on the underside of the leaf. These latter are first a light yellowish green, becoming somewhat grayish as they age and eventually attaining a rich brown. Badly infested leaves may have three-fourths of the surface or more covered with this peculiar growth.

These plant mites produce a conspicuous discoloration of beech foliage, but are rarely sufficiently abundant to injure the tree much, although they may weaken badly affected branches. Ordinarily, spraying for this mite can be justified only as a means of preventing an undesirable discoloration of the foliage.

VARIETIES of hickory nut trees are so thoroughly crossed, like varieties of apples, that they will not reproduce varietal type from seeds.



Charlie Chestnut

Observes Signs of the Times at the Convention



This has been a big year for bugs and insects. According to folks that is up on it the mild winter and lots of spring rains has hatched out an extra big lot. Its the same with the nurserymen. There was nurserymen out to the convention that has been holed in since 1930. Some I thot was plum out of business and had went back to raising cucumbers and they turned up in new suits and had there hair and beards cut fresh for the convention. There was some I talked to that has been hid in the cyclone cellar for years and have just come up to have a look around. There was some that got lost in their own nursery on acct of the overgrown bushes and the weeds and have been out there wandering around trying to find there way home. Outside of being a little thin on acct of short rations for the last five or six years they look like there was going to be some nurseries putting out bushes and stuff again like the old days.

We was glad to welcome back all the nurserymen that has been getting a free ride with the democrats. They say that the soft jobs has about petered out. The forst service, the government nurseries, the national parks, the C. C. C. and the W. P. A. and all the other stuff which the democrats has furnished to work up the money was a big help to nurserymen. All of your wifes relatives that was on the payroll at the nursery was given govt jobs which was a big help. But now the boys are back on your neck and will have to be carried on again.

Another thing a bar tender was telling me. He says that there is more drinking whiskey being drunk than in many a day. Them that has been having a swell time on two beers for 20c is now back to ordering a double rye with beer for a wash. He says he was sure glad to see the nurserymen getting back to there old selves.

At first when I went to the convention I thot that I had got into the wrong convention. It looked like the street sweepers convention on account of the white suits. Some of

us old timers with our old blue surge suits looked like we was out of date. Looks like the nurseryman has learned to be comfortable if nothing else during the time out.

I made a point to interview the bell boys as the editor of this paper told me he wanted a full and complete report from all sides of the situation. The bell boys says that for the last few years the nurserymen have been carrying their own valices to the room and wouldnt give nothing but a sour look. Now he says some give a dime and one give a quarter. However he says he had whiskey on his breath and probably got a holt of a 25c by mistake.

Most of the nurserymen I talked to says they are in favor of the govt going out of the nursery business and are convinced they should take it up with their congressman to have the govt wiped out of the nursery business. They are all in favor however that the govt should continue to go ahead and use up all the odds and ends that the nursery aint been able to move. They are going to have a committee to look after that. It was a great convention. There was so many committees reporting that some of the boys got all snarled up on what was going on.

I was making a interview with a nurseryman getting his views for the paper when he suddenly looked at the program. He says you will have to excuse me. I see there is a report on the committee on necrology which I dont want to miss. I have been having trouble with a wolly worm on the barberry and they may tell what to do about it.

In conclusion the general idea of the different nurserymen seems to be that the nursery business is Back From Hell where it has been these many years.

IN THE Great Smoky mountains have been found more than 150 different kinds of native deciduous trees and 170 species of shrubs and vines. This area has been undisturbed for centuries, and only in recent years have scientists penetrated some of its more remote parts.

MAPLE WILT.

Wilted and browned maple trees may be caused by anthracnose, sun scorch or a disease called maple wilt.

Anthracnose has never been considered serious, but it might become so under favorable conditions. In this disease the brown, withered areas follow the veins of the leaves which wither and eventually drop off.

Many maples are susceptible to sun scorch when a few days of hot sunshine follow a moist period with cool nights. Trees affected by scorch may be perfectly vigorous another season, and there is no treatment for this condition.

Maple wilt is a serious disease and is capable of killing many kinds of trees. Visible symptoms are wilting and dying leaves appearing suddenly in some part of the trees. If the affected limb is cut, green longitudinal streaks are found in the wood. If left undisturbed, the disease may travel through the whole tree, sometimes destroying it. Surgical treatment is the only known remedy, and this does not always save the tree.

AN ABUNDANCE of the minute black droppings of caterpillars, which suggest somewhat the effect of a giant pepper shaker, although they may be easily overlooked, is evidence of the presence of large numbers of small caterpillars before leaf injury becomes noticeable. Sugar maples, particularly in New England, should be sprayed to protect them from the forest tent caterpillar. In southeastern New England trees should be guarded against defoliation by the gypsy moth caterpillars, which are most common on oak trees, although they feed upon a variety of other trees.

SECRETARIES, PLEASE NOTE.

The news columns of the American Nurseryman are open to all trade organizations throughout the country. The officers can promote interest and membership in their organizations by forwarding reports of their activities for publication. Many nurserymen in your own state not now members subscribe to this magazine and will be induced to join by reading of the work of your organization. More than that, the trade throughout the country is interested to know what is going on, and greater unity of effort for the advancement of the industry is promoted in this way.

Roosevelt as Forester

President Explains Woodland Operations as Farm Venture at Hyde Park Home

President Roosevelt recently conducted some newspaper men on a tour of his farm at Hyde Park, N. Y., and his explanation how he hopes to make a profitable business out of growing trees is of interest to nurserymen. He discoursed on all aspects of his venture, from the growing of Christmas trees to the profitable use of old woodlands.

The President's property lies inland from the main Hyde Park estate owned by his mother. It now consists of 560 acres, which he has bought in several tracts over a period of years. Except for somewhat more than 100 acres used by tenants, the President is devoting all of his land to tree crops. He does no farming, he emphasized.

About 300 acres of the President's land was in woods when he bought it. He has cleared out these woods—all but one tract bought two years ago—removing dead and badly formed trees and trees of no commercial value, such as birch and ironwood. On these acres he is practicing "continuous-stand" forestry. Every year he cuts out a few mature trees and sells them for lumber and cuts a few others for sale as cordwood. He expects to continue this indefinitely, cutting no more rapidly than new growth occurs. The trees in these old woodlands are a mixture of hardwoods and evergreens.

The second phase of the President's business is growing Christmas trees. Every year for eight years he has planted about ten acres in Norway spruce, white spruce and balsam spruce, for sale as Christmas trees. It takes about ten years to raise good-size Christmas trees from the 2-year-old trees which he buys from the state. He plans to add to his Christmas tree plantations for two years more. Then he will have a 10-year rotation, which he expects to continue indefinitely. He said he cut a few, about 800, of his first planting of Christmas trees last December—and that he will cut more this year.

The Christmas trees are planted about three and one-half feet apart each way, or about 2,200 to the acre. They cost him about \$4 per thousand from the state-owned nurseries, he said. He calculated they cost about

\$12 an acre to plant, that clearing the weeds and brush during the first few years costs about \$20 an acre and that the maintenance of fire-break roads costs about \$25 an acre over the 10-year period required for the crop to mature. So the total cost of the trees and caring for them for ten years should come to about \$75 an acre, he said. Out of the original 2,200 trees, he expected to get about 1,000 perfectly formed trees an acre for sale at Christmas.

In a good year, the President said, 10-year-old Christmas trees should bring him about 50 cents each, or about \$500 an acre. Deducting expenses, he figured he would net about \$40 an acre a year before deducting interest on his original investment in the land and before taxes. Land of the type used by the President for Christmas trees is cheap and taxes on that kind of property, he said, are relatively low.

In addition to his "continuous-stand" forestry and his cultivation of Christmas trees, the President has reforested completely a number of fields. He has a fine 8-year-old stand of American larch, European larch and Japanese larch, all fast-growing trees, which he expects to cut in a year or two for sale as posts in neighboring vineyards.

Mr. Roosevelt exhibited also some 8-year-old stands of red pine. These will be thinned out in a few years for posts, and the trees which are left will be allowed to mature for lumber. In other fields the President has younger stands of red pine and of other varieties. Some of his trees were planted in April of this year. They are about six to eight inches high.

In addition to the spruces and red pines and larches, the President has plantings of two other kinds of pines, two varieties of oaks, black walnuts and tulip poplars. Only one piece of land has stumped him so far. It is an old swamp which he drained. So far, all of his plantings there have died.

NEARLY all the butternuts, hickory nuts, chestnuts and blueberries that come to the markets are still obtained from wild plants.

PENDING LEGISLATION.

Senate bill 2681, reported favorably by the Senate committee June 21, threatens violation of the fundamental principle that national parks should be safe from commercial or economic exploitation. It would authorize appropriations for the Secretary of the Interior to construct "the Colorado-Big Thompson Transmountain water-diversion project," a tunnel, nine feet in diameter and thirteen miles long, under the continental divide and through the Rocky Mountain National park in Colorado, to divert water for irrigation and power purposes. The precedent established by passing this bill would render all national parks vulnerable to exploitation.

Senate bill 2700, for the reorganization of executive departments of the federal government, does not exempt the forest service from transfer as was previously reported to be the case. On the principle that all administration of land for productive purposes should be centered in the Department of Agriculture and that conservation is a function of all government activities, the American Forestry Association has consistently opposed proposals to change the name of the Department of the Interior to the Department of Conservation and to transfer the forest service to that department.

Among other things, Senate bill 2700 would give the President six executive assistants and broad authority to shift or abolish federal agencies, to abolish the general accounting office and the office of comptroller general and to substitute a general auditing office.

The fight over the bill to reorganize the United States Supreme Court has delayed consideration of these bills, but they are on the Senate calendar for action and objections to them should be sent immediately to Senators and Representatives.

LIGHTNING MAY KILL TREES.

Although lightning frequently strikes trees, there is usually no damage to the trees or the injury is limited to the path of the electrical discharge, occasionally stripping off a narrow piece of bark or splitting the trunk or a limb. However, in rare

cases the lightning may be accompanied by St. Elmo's fire, which gives a flaming or brush discharge from every twig and leaf. In such cases the tree usually dies within a few days or, if the St. Elmo's fire should miss part of the tree, it may kill the greater part of the tree and several years may elapse before the remainder of the tree succumbs. Valuable trees may be protected from both lightning and St. Elmo's fire by lightning rods.

OLD INSECT ON PINES.

Infestation by *Amelia pallorana* of young pine transplants in the vicinities of East Lansing and Augusta, Mich., during 1936 caused considerable concern not only because of the damage done to the planting, but also because of apparent changes in the habits of an old, well known insect.

Amelia pallorana occurs throughout northeastern United States. It is a general feeder, and local outbreaks are not uncommon wherever this moth is present. It has been recorded as a pest of rose, strawberry, cherry and numerous herbaceous plants. There are several annual generations, and winter is passed in the pupal stage. The mature larva measures about three-fourths inch in length and is usually bluish green in color. Pupation takes place in a loose silken cocoon on the foliage. The adult moth measures about three-fourths inch across the expanded wings and is pale gold in color.

The infestation in the pine transplants did not attract attention until the new growth on about ninety-five per cent of the white pine had been killed. Approximately 200 acres of 4 to 6-year-old white, red, Scotch and jack pine transplants were involved. The plantings were mixed stands, and all species were infested, but the larvæ showed a decided preference for white pine. The larva, in true tortrix form, incloses its food supply by drawing two or more tender shoots together and fastening them with a loose web. Where the shoots were close together, all were excavated, for the larva did not confine its feeding to the tender needles, but also tunneled into the tender new growth. Where such tunnels were extensive, the new growth was killed.

The infestation was not discovered until May 25, when the larvæ were practically full grown. Mature specimens taken June 2 pupated immediately, and adults appeared in the cages on June 16, at the Michigan agricultural experiment station. While larvæ of the second and third generation occurred on other host plants during the season, no further infestation occurred in pine. Apparently, the larvæ are only attracted to the tender new growth on pines that develops in early spring. In all probability, this species may become a problem on new transplants, particularly where ground is covered with grass, clover or weeds.

The larvæ were readily controlled by either a contact or stomach poison. Since the infestation on pines occurs only when the new growth is developing rapidly, it is impossible to protect the tree with only one application. Also the new growth is tender at the time the infestation occurs and is particularly susceptible to spray injury. It is recommended, therefore, that young trees be protected with either contact sprays or dusts and that the applications be made as soon as the larvæ appear. A spray, using one pint of forty per cent nicotine sulphate to 100 gallons of water plus four pounds of dissolved soap, is recommended. Where either rotenone or pyrethrum is used as a dust or spray, follow the directions of the maker.

Regardless of the material used, to be effective the application must be

timely and applied in such a way that the new growth is completely covered.

PACIFIC COAST HEAD.

The Pacific Coast Association of Nurserymen elected as president this year one of the pioneers in the industry on the west coast. Charles Malmo went to Seattle, Wash., in 1891 and in 1893 commenced business on his own account. That was a year of panic, but he says it proved to be a good time to start in business because one could make progress slowly. At that time, little or no nursery stock was grown on the Pacific coast with the exception of some fruit trees, and all ornamental stock was imported from Europe and sold on arrival. Because of the long transportation required, keeping stock out of the ground too long, this was not satisfactory to the customers. Mr. Malmo decided to make larger importations and grow the plants two years before selling them. The result was excellent, and it was easy to guarantee plants to grow and to obtain a price that made this procedure profitable. Later he propagated his own stock, finding the climate there favorable. When quarantine 37 was imposed, propagation was necessary on a larger scale, and increase in that department continued until 1929, another panic year. Mr. Malmo conducts a nursery and seed store at Fourth avenue and Denny way, Seattle, Wash., and associated with him is Clark Prescott Malmo, offering landscape service.

COMING EVENTS.

August 3, Maryland Nurserymen's Association, summer meeting, Beltsville, Md.

August 10 to 12, National Association of Gardeners, annual convention, Warwick hotel, Philadelphia, Pa.

August 11 and 12, Pennsylvania Nurserymen's Association, summer meeting, Hershey, Pa.

August 23 and 24, Virginia Nurserymen's Association, annual convention, Blacksburg, Va.

August 25 and 26, Southern Nurserymen's Association, annual convention, Nashville, Tenn.

August 25 and 26, Michigan Association of Nurserymen, summer meeting, Olds hotel, Lansing, Mich.

September 1 and 2, Texas Association of Nurserymen, annual convention, Austin, Tex.

September 1 to 3, National Shade Tree Conference, annual convention, Lord Baltimore hotel, Baltimore, Md.

September 22 to 24, California Association of Nurserymen, annual convention, Hotel Oakland, Oakland, Cal.



Charles Malmo.

Coming Events

SOUTHERN NURSERYMEN'S MEET.

The Southern Nurserymen's Association will meet in annual convention August 25 and 26 at the Andrew Jackson hotel, Nashville, Tenn., in what promises to be the largest and most important meeting held by this organization in many years. The program is planned to cover the angles of the nursery industry most interesting at the present time.

Nurserymen and others are invited to make exhibits, and those desirous of doing so should get in touch with D. P. Henegar, McMinnville, Tenn., chairman of arrangements and exhibits.

All nurserymen, including members of the A. A. N. and state and regional groups, their wives and friends are cordially invited to attend.

D. P. Henegar, chairman of the arrangements committee, announces that registration will begin at 5 p. m. August 24, with a theater party for the ladies and a smoker for the men that same evening. The business meeting Wednesday morning, August 25, will be followed in the afternoon by a historical tour to include Fort Nashborough, Fort Negley, Shelby park, Old Hickory and The Hermitage, home of Andrew Jackson. A chicken barbecue at The Hermitage at 6 p. m. will precede the swimming party at the Centennial park pool. The business meeting Thursday morning and a tour of Nashville's parks Thursday afternoon will conclude the convention.

APPLE ASSOCIATION TO MEET.

The International Apple Association will hold its annual convention in Chicago, August 10 to 13. One of the principal subjects to be discussed will be apple advertising and promotion.

MICHIGAN MEETING PLANNED.

The Michigan Association of Nurserymen will hold its summer meeting at the Olds hotel, Lansing, Mich., August 25 and 26. The convention opens at 2 p. m. August 25, and the program for the afternoon includes talks on "A Successful Landscape Organization" and "The Use of Tar Paper Pots as a New Selling Medium," together with reports of the A. A. N. convention at Chicago and of general committees. A banquet with a speaker and other entertainment is planned for the evening.

The morning of August 26 a representative of the state nursery inspection department will outline new changes in inspection laws and new points of interest for nurserymen in his department. Following this will be a showing of lantern slides and movies of peonies and tulips and of the completed portion of the landscape film sponsored by the Michigan association as an educational feature. A talk on "Experimental Work in Growing Plants for the Mail-order Business" and consideration of unfinished business will conclude the convention, which is planned to adjourn about noon.

Ladies are invited to all meetings

and to the banquet, but a tour of Lansing gardens has been arranged for those preferring the trip to the meetings. A special welcome is extended to all out-of-state nurserymen.

SHADE TREE CONFERENCE.

Program of Baltimore Meeting.

The thirteenth National Shade Tree Conference will be held September 1 to 3, at the Lord Baltimore hotel, Baltimore, Md. Extensive educational exhibits, including a demonstration of how sap rises in trees shown by Johns Hopkins University, and trade exhibits of standard and new equipment and materials will in themselves be worthy of careful study.

Under the direction of C. C. Hamilton, president; Karl Dressel, vice-president; R. P. White, secretary-treasurer; L. C. Chadwick, editor; H. L. Frost, H. M. Van Wormer and W. E. Parker, members of the executive committee, an excellent program has been arranged.

Although the conference is scheduled to start September 1, a lecture made possible by the cooperation of the Maryland Garden Clubs, women's clubs, D. A. R. and Baltimore Association of Commerce has been arranged for the evening of August 31. The complete program follows:

TUESDAY EVENING, AUGUST 31.

"Annapolis in Colonial and Revolutionary Days," by George Forbes. Introduction by Howard W. Jackson, mayor of Baltimore.

WEDNESDAY MORNING, SEPTEMBER 1.

"Aims and Objects of the Florida Shade Tree Conference," by H. S. Newins.

"Noted Trees of Maryland," by F. W. Besley. Business meeting: appointment of temporary committees and reports of officers and standing committees.

WEDNESDAY AFTERNOON, SEPTEMBER 1.

"Root Extension of Shade Trees," by D. J. Bushey.

"Effect and Treatment of Girdling Roots," by H. M. Van Wormer.

"Effect of Changing Grades Around Trees," by A. W. Meserve.

"Fertilizer Formulas—Tree Responses," by H. L. Jacobs.

"Modern Methods of Shade Tree Fertilization," by L. C. Chadwick.

"Problems Facing the Arborist," by six selected speakers from six widely separated regions. Open discussion of shade tree problems.

THURSDAY MORNING, SEPTEMBER 2.

"Care of Boxwood," by C. E. Temple.

"Lightning Protection Installation," by A. W. Dodge.

"Holly Leaf Miner and Its Control," by G. S. Langford and E. N. Cory.

"Sulphur as a Control for the Eastern Tent Caterpillar," by G. P. MacLeod.

"Big Tree Moving," by William Franke. Open discussion of tree moving.

THURSDAY AFTERNOON, SEPTEMBER 2.

Field demonstration of equipment held in Druid Hill park under the supervision of Hollis J. Howe, forester of the Baltimore park board. Portable amplifiers will be used by demonstrator to enable all attending to hear explanations.

THURSDAY EVENING, SEPTEMBER 2.

Annual banquet, dance and entertainment.

FRIDAY MORNING, SEPTEMBER 3.

"Insecticides for Shade Trees," by S. W. Bromley.

"Tests with Arsenical Substitutes for Shade Trees," by C. C. Hamilton.

"Report on the Dutch Elm Disease Eradication Project," by L. H. Worthinger.

"Borer Control Experiments," by J. S. Houser. Business meeting: reports of temporary committees and election of officers.

FRIDAY AFTERNOON, SEPTEMBER 3.

Boat trip to Annapolis, gives about two hours ashore to see the Naval Academy and points of historical interest. Buffet supper served during return trip.

O. E. DILL, Carmi, Ill., nurseryman, recently completed a new Wonder greenhouse, 18x42 feet.

AFTER-CONVENTION TRIP.

To recover from his arduous duties as president of the American Association of Nurserymen during the convention, July 12 to 15, Clarence O. Siebenthaler left at its close with Mrs. Siebenthaler and Mr. and Mrs. Owen C. Wood and their son on a trip in the Woods' trailer up into Canada. The Siebenthalers said the trailer was equipped with everything except a lawn mower and a fan, and since they intended letting no grass grow under the wheels on their trip to the cool north woods, neither seemed necessary.

CHASE ON WORLD TRIP.

Robert C. Chase, secretary-treasurer of the Chase Nursery Co., Chase, Ala., accompanied by Mrs. Chase, is on a "slow and easy" journey around the world on the British freighter M. V. Thurland Castle. They sailed from New York May 19 and report that the journey through the Panama canal to Manila, Kobe and Shanghai was a most delightful one, and they are enthusiastic over this method of seeing the world. They are due back in New York in late September. They enjoy a long boat ride, having made a number of trips on freighters from Mobile to British ports during the past several years.

NEW MICHIGAN LAW.

Recently in Michigan an act was passed amending the nursery inspection law. One provision is of interest to all nurserymen in view of legislation emanating from Washington, D. C. It reads: "It shall be unlawful for the commissioner of agriculture to grant a certificate of inspection to land owners who are about to sell or remove unlawfully trees or plants originally supplied from the state or federal or state and federal nurseries."

NEW COLORADO LAW.

The office of the state entomologist and the bureau of plant and insect control have been divorced from the Colorado State College experiment station by action of the general assembly of Colorado. Roy G. Richmond is the new state entomologist and his headquarters are in the State Museum building, Denver.

GYPSEY MOTH QUARANTINE.

The gypsy moth quarantine was extended to include Clifton township, Lackawanna county, Pa., July 15, by order of J. Hansell French, state secretary of agriculture. The order continued the provisions of the general quarantine order to regulate the movement of products within the quarantine area to prevent reinfestation of sections where eradication work is under way or has been completed.

PACIFIC COAST FINANCES.

The report of Walter R. Dimm, treasurer of the Pacific Coast Association of Nurserymen, for the year July 1, 1936, to June 30, 1937, shows receipts of \$3,054.86 and expenditures of \$2,847.93, leaving a cash balance of \$206.93. The cash balance July 1, 1936, was \$73.26.

Quarantine on Pests, Not Plants

Present Federal Policy, Particularly on Quarantine 37, Outlined before A. A. N. Convention — By Lee A. Strong, Chief of Entomology and Plant Quarantine

The nurserymen of America are as intimately associated with the affairs of the bureau of entomology and plant quarantine of the United States Department of Agriculture and as vitally concerned with its activities, accomplishments and mistakes as is any group of agriculturists in the country.

During the past few years while the giving of work to unemployed and needy has been of the utmost importance, the bureau of entomology and plant quarantine wherever possible has made use of emergency funds to further the work of pest eradication and control. Since 1933, when the first emergency funds became available, until July 1, 1937, we have used \$37,526,392 for such work and we have employed as many as 27,725 men at the peak, the average being 16,000. For the first six months of the current fiscal year an additional \$4,660,564 of emergency relief funds has been provided. We have been able to step ahead by years the control and eradication of barberry, white-pine blister rust, citrus canker, phony peach, Dutch elm disease, pink bollworm and gypsy moth, and other features of control and eradication work.

Dutch Elm Disease.

One of the really important jobs under way at this time is the eradication of the Dutch elm disease, which was first found in this country in 1930. Since that time in the inspection from the ground and by autogiro of millions of elm trees in the United States, there have been found to June 26, 1937, 22,898 trees in which the disease was confirmed. Of this number only eighty-six were found outside the main infected area in the vicinity of New York; namely, thirty-three at Cleveland, O., thirty-three at Indianapolis, Ind., and from one to six in nine other localities.

In eliminating dead or dying trees in order to prevent building up of infestation by the beetle which carries the disease, 3,323,339 elm trees in a dead or dying condition from one cause or another have been removed. In this work up to June 30, 1937, \$8,336,875 of emergency money and \$672,312 of regular money have been expended. For the first six months of the present fiscal year, an additional \$1,724,040 of emergency relief funds has been provided, and \$460,860 of regular funds has been appropriated for the current fiscal year. If permitted to continue in this work on the scale which its importance justifies, it is believed there is every reason to look forward to complete extermination of the disease in this country. Definite progress has been made and all the information we are able to obtain in this country and abroad indicates that the program we are pursuing is the only one which promises to be successful and it does promise to be successful.

Japanese Beetle.

Of importance to the nurserymen everywhere is the Japanese beetle situation, and during the past season build-

ing up of infestation outside the quarantine area was not sufficiently important to warrant the extension in any marked degree of the quarantine area. Inevitably, unless something comes into the picture of which we are not aware, the Japanese beetle will ultimately spread to all those parts of the United States where it would find suitable environment. The job of enforcing the quarantine on account of the Japanese beetle is becoming more and more difficult and more and more complicated with an increasing number of people and industries affected. It is believed there is still justification for maintaining a federal quarantine, but sooner or later it would seem that the point would be reached where, by reason of large area or number of separate infestations, the federal quarantine would no longer be warranted.

This and other conditions having a bearing on the interstate movement of plant products bring forcibly to our attention the need and importance of bringing about a standardization and uniformity in inspection methods and quarantine activities of the states and of the federal government. That plant quarantines are necessary as a protection to uninfested and uninfected areas against major plant pests which are not established therein is generally recognized. The fact that quarantine action has been taken presupposes that a dangerous plant disease or insect pest is involved, the spread of which should be prevented; however, the effectiveness of such quarantine depends on both enforcement and compliance. Enforcement rests with the officials, while compliance is a function of the person moving the plants. In the enforcement of federal quarantines we have assisted by supplementing the inspection forces in the control areas, with transit inspection maintained at the more important transfer terminals for the purpose of intercepting shipments moving by freight, express and mail in violation of quarantines. States also have at their disposal means for enforcing state quarantines, although they are usually somewhat limited. In a number of states enforcement of quarantines is entirely inadequate, due to lack of man power and other facilities. The effectiveness of quarantines in preventing the spread of dangerous plant pests under such conditions must depend pretty largely, if not entirely, on the compliance of the shippers and common carriers.

Quarantine Complications.

As a whole, such people appreciate the value of pest control and are anxious to comply with quarantines, but in many instances are not able to comply fully because of the numerous state quarantines now in existence, which are complicated and involved as to procedure and subject matter covered in such quarantines. Do you know that there are now in existence over 200 separate and distinct state plant quarantines, covering fifty-two plant pests? These in-

clude thirty-two state quarantines covering the subject of corn borer alone, no two of which are alike. The alfalfa weevil is the subject of twenty-five state quarantines, all varying either as to infested area, commodities covered or as to treatment of such commodities as a prerequisite of shipment. Similar conditions apply all the way down the line in practically every instance where more than one state has a quarantine against the same pest.

There would seem to be no logical reason why fifty-two plant pests now the subject of more than 200 state quarantines could not be covered by fifty-two uniform quarantines, or why the thirty-two quarantines now applying to corn borer could not be reduced to one quarantine, or the twenty-five now enforced against the alfalfa weevil could not be reduced to one. If this cannot be done, or if it is not done, what is going to be the situation with respect to the Japanese beetle quarantine if and when the federal quarantine is given up? Standardization of inspection work and state quarantines can be accomplished, and I am pleased to be able to say that the state quarantine officers, assisted by the bureau, are making progress in that direction. More progress is needed, and I am sure it will come.

Peach Mosaic.

You have been familiar for several years with the work that has been done on the phony disease of peaches in the south. A newly discovered disease—peach mosaic—found for the first time at Brownwood, Tex., during 1931, has since been found in the states of Colorado, Utah, Arizona, New Mexico, Oklahoma and California. It seems to be an extremely serious virus disease, which may be artificially transmitted by bud wood or peach bark grafts from either twig or root bark; hence, the most probable means of long-distance spread is through the medium of infected host plants or budding wood. The natural spread seems to be rapid and apparently occurs in colony formation.

Eradication of this disease is looked upon as practicable if we may depend on evidence gained as a result of the work in Colorado and Utah, the only states where the eradication work has been energetically carried on a sufficient length of time to make accurate observations possible. The program on this disease and on the phony peach disease is carried on in cooperation with the states concerned, and since August 1935, to date, 185,000 orchard trees, more than 6,500,000 abandoned orchard trees and more than 55,000,000 escaped peach trees have been destroyed. Much more of this type of work could well be done in the interest of pest control in this country.

At the convention of American Association of Nurserymen in Chicago, July 20, 1933, I delivered an address to which I gave the rather imposing title, "The Past, Present and Future of Quarantine 37." I pointed out what I

thought were the bad features of the procedure we were following in enforcing the provisions of quarantine 37, and while I did not indulge to any marked degree in crystal gazing in discussing the future of quarantine 37, my limited entry into this field met with about the same success that most such efforts meet with.

Quarantine 37.

Following the delivery of this address, a public conference was called in Washington, October 25, 1933, to reexamine the underlying principles involved in the interpretation and enforcement of quarantine 37. It was specifically proposed to consider the elimination of consideration of the availability of plants in this country; limitation to be placed on the number of plants which may be imported by reason of facilities, or lack of the same, for adequate inspection; value of considering horticultural qualifications of applicants in the issuance of permits; desirability of continuing to hold certain plants for two or more years before release; the advisability of providing for the inspection of imported plants at New York and certain other ports of entry rather than shipping them to Washington as at present, and such other pertinent items as might be brought up.

At this conference, as is usual with such conferences and public hearings, the sentiment of those in attendance was pretty largely molded in advance of the conference by what might be termed paid representatives of special groups, and the fundamental principles of the quarantine were either discussed superficially or not touched on at all. Aside from the comparatively few people who are interested commercially in the effects of the quarantine, those large masses of people who are affected in a small way individually, but in a large way collectively, are seldom if ever represented at these conferences and public hearings and their real opinion is not therefore brought into public view.

Quantity Limits.

It has been frequently noted that, in the words of the federal horticultural board, quarantine 37 voiced the policy of practical exclusion of plants if pests were to be excluded and thus necessarily of a given plant when that plant was known to be available in the United States. For the first few years following the promulgation of quarantine 37, no attempt was made to establish definite quantity limits of imports. The volume of imports was controlled to some extent by selecting permittees and by refusing permits for what were believed to be available varieties. The public became more acquainted with the procedure for importing as time passed and consequently as the work grew, the need for quantity limits became apparent if the quarantine were to accomplish its announced purpose.

Some rather liberal quantity limits were established during the fiscal year 1925, and these were somewhat reduced for the fiscal year 1926. No limits were placed on narcissus bulbs until the second year of importation under special permit. All the early limits applied to the varieties or, in some cases, species, and importations were made

cumulative in the fiscal year 1927, except for narcissus bulbs. Thus, when an importer had entered the limit of a variety he would be refused permits for further importations of that variety. Narcissus bulb limits were made cumulative in the fiscal year 1929. In the fiscal year 1930 the narcissus bulb quantity limit was placed on a generic basis, and the previous cumulative principle was abandoned for that genus. The same step was taken beginning with the fiscal year 1931 for all other genera. Between the fiscal years 1925 and 1931 there was a gradual lowering of quantity limits.

Generic Base Limits.

In establishing the quantity limits on a generic basis, the old bases, which differed for the amateur and commercial grower and as to the origin of material, were discarded and one set of limits was made to apply to all without regard to the origin of the material. Although there had been a general and gradual reduction in limits from those first established in 1925 to the ones which became effective on July 1, 1930, it may be said that to a great extent the importers themselves set the new limits of July 1930. As a basis for formulating these new limits, analyses were made of the importations of genera principally imported and it was found that, broadly speaking, 100 plants of a genus of tree or shrub, 100 to 500 plants of a genus of herbaceous perennials and 1,000 to 50,000 of a genus of bulbous and other root-crop genera would amply meet the needs of the importers as shown by actual records of their importations when limits were more liberal.

Therefore, while the new limits appeared to involve drastic reductions, actually they fitted nicely with the importing habits of the public at that time. Some consideration was given to the case with which a kind of plant could be reproduced, its susceptibility to unfavorable transit conditions and the popular demand for it, but in view of the general restrictions effected by these limits, the question of pest risk—the real fundamental factor in question—was not considered in setting the limit on any one genus. Protests as to certain limitations were received, and the limits were reviewed and in some instances revised with liberalizations, effective July 17, 1931.

Special Limitations.

When the limit of 100 plants was established for chrysanthemums and a limit of 250 was set for carnations, it did not mean that chrysanthemums involved any greater pest risk than carnations. The decision was made more on the basis of the relative ease of propagating the chrysanthemum. The placing of a limit of 500 for azaleas and rhododendrons, with a comparable limit of 100 for conifers, was based more on relative demand. Likewise, demand and purported horticultural difficulties influenced the placing of 50,000 for the limit of iris bulbs, while a limit of only 1,000 was established for oxalis.

When the limit was raised on July 17, 1931, from 1,000 to 5,000 for gladiolus bulbs and tuberous-rooted begonias and was not raised for gloxinias, the question of demand, not pest

risk, entered into the picture. The fact that the limit on gloxinias was not likewise raised was due only and entirely to the lack of evidence that a need for greater liberality existed in the gloxinia limit. Some limits, as for example the one on delphiniums, were raised largely because of the heavy losses from storage rots, heating and other unfavorable transit conditions.

So much for the history of quantity limits. Their original purpose was in line with the announced purpose of quarantine 37; namely, the ultimate exclusion of all stock not absolutely essential to the horticultural needs of the country. More recently they have been looked upon as justified only as a means for reducing the total volume of imports to that which could be adequately inspected by the personnel, and with the facilities available. They no longer serve even this purpose.

Evasion of Limitations.

Early in the administration of the quarantine it was apparent that one importer might have good reason for wishing to place his importations in the care of another, where better propagating facilities, more favorable climatic conditions, etc., were available. A contract form signed by the importer and his agent and filed with the department gained the sanction of the department for such an arrangement. Doubtless there may have been an occasional effort to use this contractual arrangement as means of defeating the quantity limitations, but certainly the practice was not general. Today the practice would seem to be in general use whenever the limits prevent one from importing the desired number of plants.

It is known that certain firms have subsidiaries and, when the question of quantity limits is raised with the parent firm, the subsidiaries apply for and receive permits. Members of an importer's family, his employees, possibly his neighbors and friends, now apply in their own names, submitting contract forms with their applications. As an extreme illustration, which after all is extreme only in degree, I mention a firm which, in addition to importing the limit of a bulbous genus, contracted to grow, or allowed to be grown on its premises, the like importations of twenty-seven other permittees. It is open to suspicion that one importer thus actually imported twenty-eight times the quantity limit.

Many other illustrations involving only fewer importations, but accomplishing the same purpose of beating the quarantine, can be found in an examination of our files. Amateurs as well as commercial interests are involved, because under our American system of government one person is entitled as much as another to equal rights and privileges. It is obviously not within our province to attempt to say who shall import, as long as the importer agrees to utilize his imports for one of the purposes authorized under the quarantine. However, it is within our province to say, and we do say here and now, that amateurs and individuals are entitled to and will receive the same consideration in the granting of permits as firms and corporations.

Since the A. A. N. convention in 1933, studies have been made of our means of determining the new varieties and

necessary propagating stock, and the results achieved. According to our annual reports, at the close of the fiscal year 1922, 11,344 varieties of plants had been listed on special permit application forms; 89.1 per cent of these were approved for entry. By the close of the fiscal year 1933, 96.2 per cent of the 62,570 varieties for which permits had been requested were approved for importation. In other words, while the net number of approved varieties had increased in those eleven years to nearly six times their number as of June 30, 1922, the net number of rejected varieties was less than two times the 1922 figure.

On the other hand, hundreds of these approved varieties had not been listed on permit applications for many years. The trade had, in effect, "rejected" them as changing conditions and shifting demands brought about the need for different, newer and often better varieties. A review of the existing rejections, the majority of which had not been questioned by reason of later requests to import the varieties involved, showed that many so-called "rejected" varieties should be approved for entry. No new rejections were made, and gradually we discontinued entirely, except for narcissus bulbs, the effort to designate varieties approved for entry.

Insofar as varieties listed on applications for permit are concerned, the applications are now and will continue to be approved or disapproved solely on the basis of pest risk, in accord with the intent of the plant quarantine act. This policy has been in effect for some time.

Basis of Approval.

In selecting those applicants who should be approved to receive permits to import it was formerly necessary, in order to determine an applicant's horticultural qualification, for him to show that he was an experienced grower of the type of plant desired and had ample facilities for the propagation of the proposed imports. Under this system there was little opportunity for the amateur to import, most importations being made by the larger commercial growers. Amateurs were approved on the basis of specializing in a genus, opening their estates to the public and exhibiting at the larger horticultural shows. Hybridizers were handled on the same basis as amateurs, except that they were permitted, in the early days, to sell increase in the same manner as the commercial propagators. Beginning in 1926 there was a tendency toward greater liberality in establishing status, which culminated in the decision reached in this bureau in 1934 to discontinue this phase of our procedure. It is questionable whether this department had a right under the plant quarantine act to say who is and who is not eligible to receive permits.

The wording of the regulations supplemental to quarantine 37 explicitly states that certain importations are to be made for certain purposes which are in line with the original objective of the quarantine. I question whether they are in line with the wording of the act under which the quarantine was written. Nevertheless, the question of ultimate utilization of imports under special permit has always been intertwined with the procedure for admin-

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istering that quarantine. With the discontinuance of the question of the applicant's horticultural qualifications to import, certain relaxations in the attitude toward utilization were obviously necessary. The quarantine makes no provision for entry under regulation 14 for immediate resale, but almost any other proposed utilization could be, and is, construed as falling under the heading of one of the approved purposes. Consequently, insofar as utilization is concerned, no applications for special permits are denied except when it is known that immediate resale is contemplated. This liberalization brings the administration of the quarantine more nearly perhaps, but not entirely, into legal relation with the act.

Field Inspections.

The plant quarantine act does not provide for any procedure whereby an importation once released at the port of entry must be grown under approved horticultural conditions for any period to give the department opportunity for further inspections to determine apparent freedom from pests. Consequently, field inspections of special permit importations have been discontinued. I am not prepared to say, however, that in all cases there should

be no follow-up field inspections, but I repeat what I said in 1933—that inspection methods have improved, knowledge of conditions has been added to, and more reliance can now be placed in inspection at the time of entry than was the case in 1919, when the quarantine was promulgated. Importers are still required to sign the agreement to hold their imports for a period of at least two years.

I have attempted to detail the principal features that have been found to be out of harmony with the legal provisions of the plant quarantine act, with present needs of the country and with sound quarantine practice. Most of those features ignore or disregard entirely the pest risk which should be the real basis of the quarantine.

Let us now turn for the moment to the quarantine itself to see what is necessary to bring it in harmony with the act.

Provisions of the Act.

In brief, section 1 of the plant quarantine act requires that nursery stock imported or offered for entry must be imported under permit issued under such conditions as the Secretary of Agriculture may prescribe, in addition to those laid down in the act. Each shipment

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must be accompanied by a certificate of the proper official of the country from which the importation is made to the effect that it has been inspected and is believed to be free of pests. When the conditions prescribed by the Secretary of Agriculture have been met, it is mandatory for him to issue a permit for the importation. It is provided that the Secretary may prescribe regulations to govern the entry of nursery stock from countries not maintaining official systems of inspection. Importations by the Department of Agriculture may be made for experimental or scientific purposes under such regulations as may be prescribed by the Secretary of Agriculture. Please note that this section only provides for the Secretary to make conditions of entry. He may require that importations shall be free of pests, and it is within his province to cause inspection to be made to determine compliance with this requirement. He may require that entry be made at specific ports in order that such inspection may be made.

The procedure we have followed has been subjected to careful analysis and compared in detail with the language of the plant quarantine act, and after mature consideration it is believed that specific authority does not exist for limiting the quantity of nursery stock that may be imported from countries with inspection systems or for designating a given person as one qualified to receive importations or for prescribing the purpose for which a given importation shall be used or for exacting an agreement that the importation shall be grown under departmental observation for a given length of time.

Section 2 of the act requires that a notice shall be given upon arrival of a shipment of nursery stock at the port of entry and that before such stock is removed from the port of entry a notice of shipment shall also be given. No interstate shipment of an importation of nursery stock may be made until either such notice has been given or the stock has been inspected by a state official. Please note that the notice of shipment is to be given before the removal of the importation from the port of entry. This notice is not the condition of entry which a regulation promulgated by the federal horticultural board (HB-134, March 23, 1921) has attempted to make it. Please also note that, for interstate shipments, a notice of shipment or state inspection is required. Once that notice is given, or as soon as the shipment has received state inspection, further interstate movement is subject only to such restrictions as may apply to interstate movement of like domestic material, except in the matter of marking. Subsequent notices are not required by the act as they are by quarantine 37.

Section 3 requires that importations of nursery stock are to be marked in a specified manner.

Section 4 requires that importations of nursery stock moving interstate shall be marked in the manner specified unless and until inspected by a state official.

The term "nursery stock," as used in these sections, is defined in section 6 to include "all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit, and ornamental trees or shrubs, and other plants and plant products for

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propagation." Field, vegetable and flower seeds, bedding plants and other herbaceous plants, bulbs and roots are not defined as nursery stock and therefore were not originally subject to the restrictions of entry contained in sections 1 to 4 of the act.

Section 5 provides that whenever the Secretary of Agriculture shall determine that the unrestricted importation of any plant or plant product not defined by the act as nursery stock may result in the entry of injurious pests, he shall call a public hearing and then promulgate his determination, specifying the class of plants or plant products to be restricted and the country or countries where they are grown. Thereafter, or until such promulgation is withdrawn, these materials are enterable only under the conditions laid down in sections 1 to 4, which I have just discussed.

These five sections, with the definition of nursery stock in section 6, comprise that part of the plant quarantine act which deals with the restrictions on importations.

Section 7 provides means whereby, after due public hearing, the Secretary of Agriculture may cause the exclusion of a plant or plant product to prevent the introduction of a pest. His determination of such necessity, in the form of a quarantine notice, makes it unlawful to import the plant or plant product for any purpose whatever except by the Department of Agriculture for experimental or scientific purposes. The power of exclusion is in this section of the act itself. The Secretary's action in promulgating a notice of quarantine merely makes the act operative with respect to the plant or plant product in question. No provision exists in this section for restricted entry.

Administration of Act.

With this provision of the act in mind let us look to quarantine 37 and our method of administering it. At this point it should be stated parenthetically that the classes of plant materials now restricted by that quarantine which are not defined as nursery stock in section 6 of the act were brought under the provision of sections 1 to 4 of the act by due process, in accordance with the procedure outlined in section 5. I need say nothing further as to the legal aspects of quantity limits, availability, horticultural qualifications to import, utilization or delayed release; that is, growing imports under agreement for a period. Nevertheless, quarantine 37 contains reference to quantity limits and purpose in regulations 1, 3, 4 and 14. Availability is touched upon in regulations 1 and 14. Three definite prohibitions such as should be written in accordance with section 7 of the act are to be found in regulation 3. These prohibitions are not written into the quarantine itself, but are parts of a supplemental regulation. Prohibitions on certain materials have been administered during the past several years under regulations 3, 14 and 15 of quarantine 37. It is believed these prohibitions should be the subject of prohibitory quarantines under the plant quarantine act or the prohibitions should be dropped.

The foregoing instances indicate that quarantine 37 should be examined openly in the light of the provisions of the law under which it was promulgated. As previously shown, many steps have



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already been taken in an effort to bring our administration of this quarantine more nearly into accord with the law. It is admitted these steps are not strictly in accordance with the purpose announced when the quarantine was promulgated or with the policies followed in the early years of the administration of that quarantine.

The question to be faced squarely is—shall we modify our policies and procedures and quarantine 37 to fit the act, or shall the act be modified to fit the policies expressed in and by quarantine 37? The former step is in our power to take, but the latter is for the Congress to consider. It is my opinion that action in both directions is needed. For example, it would seem proper that we should have legal authority in certain instances to require propagation of imported stock under safeguards until the pest status of the importation has been determined sufficiently to decide whether the risk of introducing pests actually exists. With some shipments it is impossible to make this determination at the time of entry because the immature stages of development of some organisms present are impossible of diagnosis.

Aim Is Pest Exclusion.

Many American growers have built their businesses on the trade protection afforded by the policies followed in administering quarantine 37. In justice to them, the department has issued repeated statements pointing out that the plant quarantine act and quarantines promulgated thereunder should be administered for the sole purpose of preventing the entry into this country and the spread within the United States of injurious plant pests. These statements have been a warning to growers to adjust their businesses away from the false basis of the trade protection given them by the administrative procedure we have been discussing.

Quarantines are and should be for the purpose of preventing the entry and movement of pests and for facilitating the entry and movement of products. Quarantine 37 has been used more for

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the purpose of preventing the entry and movement of products and for creating monopolies in the production of certain fancy varieties of plants. At numerous public hearings and conferences held on this quarantine in Washington the evidence has forced one to conclude that the greater interest was in trade protection than in pest protection.

We witnessed not so long ago the spectacle of a certain group urging the continued admission of a large class of products infested by a certain pest on the theory that it had not been proved that this pest would transfer to other

commodities. The exclusion was demanded by the same group of another product carrying a pest which cannot be distinguished microscopically from the one infesting the products the entry of which that group demanded. Changes in the quarantine have been made, changes are being made and changes will continue to be made until finally, in spite of the obstacles thrown in the way, the quarantine will be placed on the basis which has for its purpose the prevention of pest movement and not the prevention of plant movement.

In conclusion, I wish to emphasize again the need for more adequate inspection facilities at New York and certain other ports of entry. The examination of plant imports in modern inspection houses in New York and other ports of entry would not only afford greater protection to the country, but would obviate the necessity of shipping plants to Washington, frequently under adverse conditions, not to mention the cost in time and money.

COLUMBUS LANDSCAPE GROUP.

Meeting Held at University.

The July meeting of the Columbus Landscape Association was held in the Horticulture building on the Ohio State University campus, Columbus, the evening of July 20, with practically 100 per cent attendance of members.

Prior to the meeting, a tour of the university gardens and the experimental work in plant materials was conducted by Prof. L. C. Chadwick, after which a few of the experiments being conducted in the greenhouses were explained by Gustav Poesch. Louis Fieber, of the university grounds department, demonstrated the use of shotgun shells loaded with arsenate of lead for the dusting of ornamental trees.

The meeting was called to order by President Harold C. Esper, of the university, and the roll call and minutes were read by Secretary Speed, after which the new members were introduced to those in attendance.

Walter Tucker, of the speakers' bureau committee, again stressed the need of the members' choosing more general topics for discussion. He reported also on the talk given on flower arrangement by Mrs. Garry, Cincinnati, at the Bexley high school, which was partially sponsored by the association.

President Harold C. Esper introduced Prof. George McClure, of the university agronomy department, as the speaker of the evening. Professor McClure, who has had a wide experience in the matter of lawns, chose for his subject "Diagnosing Lawn Problems." After making the statement that the average lawn is only second or third-grade, he listed the following as outstanding causes of poor lawns: Improper soil conditions, too much shade, insect pests, fungous diseases and the lack of a proper maintenance program.

Among the many suggestions given were: In case of poor soil, remove the upper two or three inches and replace with good soil. In case of too much shade for the growing of even a shady lawn mixture, either remove part of the shade or substitute some other type of ground cover for the grass.

In the building of a new lawn, incorporate an abundance of phosphate fertilizer in the soil, since it is difficult

for this nutrient to penetrate into the soil and hence it does little good to apply it to the surface after the lawn is completed. Organic fertilizers are desirable for supplying nitrates, since they result in a slower and steadier growth. Since crab grass is an annual, the best way to control it is to make conditions ideal for the growth of the lawn grass during the time that the crab grass is not making its growth, which means during the spring and fall. If the lawn grass is kept in good condition at these times, the crab grass will not be able to compete with it during the summer months, which is the time this troublesome grass makes its best growth, because it likes plenty of light and moisture.

For a change from the usual sunny lawn mixtures, which usually contain higher percentages of bent grasses, the speaker stated that the following mixture has been used to good advantage on golf courses from here north: Seventy per cent Chewings' fescue, twenty per cent Kentucky blue grass and ten per cent Highland Colonial strain of bent. For a shady lawn mixture he suggested either eighty per cent Chewings' fescue and twenty per cent Velvet bent, or ninety per cent Chewings' fescue and ten per cent Velvet bent.

A general discussion of other lawn problems followed, and then the group adjourned to the greenhouses, where a Dutch luncheon awaited them.

LAKE COUNTY ANNUAL MEETING.

Possibilities for erection of an appropriate, landscaped signboard at some advantageous spot along a main highway, advertising Lake county as a nursery center, were discussed Wednesday night, June 30, at the annual meeting of the Lake County Nurserymen's Association, held at the Parmly hotel, Painesville, O. A committee was appointed to investigate the matter and report on locations and cost.

The same officers were reelected for another year. They are: Paul J. Shumaker, of Call's Nurseries, Perry, president; Raymond Cook, of Cook's Nurseries, Geneva, vice-president; Dorr R. Cone, of the Champion Nurseries, Perry, secretary, and Charles Kallay, of the Kallay Bros. Co., Painesville, treasurer.

AMERICAN NURSERYMAN

urer. Joseph Martin, of the Joseph F. Martin Co., Painesville, was appointed to fill the expired term of Paul Kallay on the executive committee. Other members of this committee are Arthur N. Champion, of the Champion Nurseries, Perry, and Bailey Kallay, of Kallay Bros. Co.

The group voted to extend an invitation to the Ohio State Nurserymen's Association to hold its summer meeting in Lake county again, and it was decided that if the state association declined the offer, the local association would plan an outing in August.

BOBBINK & ATKINS' PICNIC.

Bright and early Wednesday morning, July 14, a large group of office, nursery and greenhouse employees gathered at the Rutherford office, the starting point of Bobbink & Atkins' Social Club's annual picnic. Promptly at the appointed hour, the procession of cars departed for a delightful summer resort, Green Pond hotel, Green Pond, N. J.

On arrival, the guests were ushered to dressing rooms, provided for the convenience of the bathers. A good swim before 1 o'clock sharpened appetites for a savory dinner of roast chicken with all the trimmings, served on banquet tables, attractively arranged and decorated. The meal was delicious, served quickly and excellently. After the demi-tasse, a few well chosen remarks were made by several department heads, after which the group adjourned to the baseball field, where a big-time baseball game was won by the landscape department. Quoits, cards, rowing, canoeing and swimming contests were among the other attractions offered. Prizes were awarded to the winners of the contests. The remainder of the evening was spent in dancing.

The club, headed by Mrs. Louise Duff, president; Mrs. Olga Pelak, vice-president, and Rudy Mitchkoo, secretary and treasurer, has begun making plans for the annual fall dinner-dance.

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WARNS OF TAX PENALTIES.**Returns under Social Security Act.**

Delinquent employers of the florists' and nurserymen's industries were recently advised by Commissioner of Internal Revenue Guy T. Helvering to make immediate tax returns as required under the provisions of titles VIII and IX of the social security act to avoid further payment of drastic penalties which are now accruing.

Commissioner Helvering pointed out that every person employed by florists, nurserymen and seedsmen comes under the provisions of title VIII, which imposes an income tax on the wages of every taxable individual and an excise tax on the pay roll of every employer of one or more. This tax is payable monthly at the office of the collector of internal revenue. The present rate, for employer and employee alike, is one per cent of the taxable wages paid and received.

Under title IX of the act, employers of eight or more persons must pay an excise tax on their annual pay roll. This tax went into effect January 1, 1936, and tax payments were due from the employers, and the employers alone, at the office of the collector of internal revenue the first of this year. This tax is payable annually, although the employer may elect to pay it in regular quarterly installments.

Employer Responsible.

The employer is held responsible for the collection of his employee's tax under title VIII and is required to collect it when the wages are paid the employee, whether it be weekly or semimonthly. Once the employer makes the one per cent deduction from the employee's pay, he becomes the custodian of federal funds and must account for them to the bureau of internal revenue.

This is done when the employer makes out treasury form SS-1, which, accompanied by the employee-employer tax, is filed during the month directly following the month in which the taxes were collected. All tax payments must be made at the office of the collector of internal revenue in the district in which the employer's place of business is located.

Penalties for delinquencies are levied against the employer, not the employee, the commissioner pointed out, and range from five per cent to twenty-five per cent of the tax due, depending on the period of delinquency. Criminal action may be taken against those who willfully refuse to pay their taxes.

The employers of one or more are also required to file treasury forms SS-2 and SS-2a. Both are informational forms and should have been filed at collectors' offices not later than July 31, covering the first six months of the year. After that they are to be filed at regular quarterly intervals. Form SS-2 will show all the taxable wages paid to all employees and SS-2a the taxable wages paid each employee.

Participation in a state unemployment compensation fund, approved by the social security board, does not exempt employers from the excise tax under title IX, nor does the fact that there is no state unemployment compensation fund relieve the employer of

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Our usual line of quality nursery stock, including Shade and Flowering Ornamental Trees and Specialties, Fruit Tree Seedlings and Roses.

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We offer for Fall 1937 and Spring 1938 complete line of Evergreens, Pink Flowering Dogwood, Azaleas, Deciduous Magnolias, Shrubbery, Shade Trees, Fruit Trees, etc.

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his federal tax payments. In those states where an unemployment compensation fund has been approved, deductions up to ninety per cent of the federal tax are allowed the employer who has already paid his state tax. These deductions are not allowed unless the state tax has been paid.

This tax is due in full from all employers in states having no approved fund. The rate for 1936 was one per cent of the total annual pay roll containing eight or more employees, and for 1937 it is two per cent. The rate reaches the maximum three per cent in 1938. The annual returns are made on treasury form 940.

An employer who employs eight or more persons on each of twenty calendar days during a calendar year, each day being in a different calendar week, is liable to the tax. The same persons do not have to be employed during that period, nor do the hours of employment have to be the same.

Important Features.

The following features must be carefully considered in making returns:

Actual money, when paid as wages, is not the sole basis on which the tax is levied. Goods, clothing, lodging, if a part of compensation for services, are wages and a fair and reasonable value must be arrived at and become subject to the tax.

Commissions on sales, bonuses and premiums on insurance are wages and taxable.

Officers of corporations whether or not receiving compensation are considered employees for the purpose of taxation.

Wages paid during sick leave or vacation, or at dismissal are taxable.

Traveling expenses required by salesmen are not wages if the salesmen account for, by receipts or otherwise, their reasonable expenditures. That part for which no accounting is made is construed as a wage and is taxable.

Exercise great care in filling out treasury forms SS-1 and 940. Directions are easy to follow and correct returns mean no unnecessary delay.

NORTH JERSEY CLAMBAKE.

The second annual clam bake of the North Jersey Metropolitan Nurserymen's Association was held July 20 at Forest Hill park. Colonel Phillips umpired a softball game. After a swim in the lake there were all sorts of races, including a ladies' sack race. The tug of war between the married and the single men was won by the single men. The bar was busy. Robert Waidmann and his fair assistant amused the children all day with games and races.

There were 102 persons present and all members with their families and friends sat down together to enjoy the real old-fashioned clambake. George Wireman and his Bavarian orchestra furnished music during the feast and later for dancing. The crowd held the orchestra far into the evening singing old folk songs.

Charles Hess, president and head of the entertainment committee, saw to it that everyone had a good time and plenty to eat. William Hallicy, Sec'y.

AMONG the donors of prizes in a garden contest at Los Gatos, Cal., was Elliott's nursery.

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Nursery VOLCK



DISCUSS NEW GRADES' BILL.

California Plant Standards Set.

A mass meeting of members of Horticultural Industries, Inc., was attended by nearly 300, gathered on the second floor of MacKay's Business College, 612 South Figueroa street, Los Angeles, Cal., Monday evening, July 12. The occasion was a jubilant one, due to the fact that the much-desired grades and standards bill is now a law, to become effective August 28. J. Lee Hewitt, new chief of the bureau of nursery service, was guest speaker of the evening and gave a summary of the law's features, after which the meeting was thrown open for questions and discussion.

In introducing Mr. Hewitt, President Roy Wilcox, Montebello, Cal., said the law is a group of regulations that California nurserymen themselves have been working on for years and that there is much in the law and much to be understood. He said the new chief of the bureau of nursery service is not a stranger to most of the members, since he has lived in Orange county for years and has been associated directly or indirectly with the nursery and horticultural industries for a great number of years and is familiar with many of the problems of the nurserymen.

Mr. Hewitt referred to the grades and standards law as a measure to put the nursery business on its feet as a standard business, selling standard merchandise. After August 27 every nurseryman will be responsible for certain things in connection with nursery stock, bought or sold. Mislabeling must be reported, either to set the unintentional violator straight or to make the intentional violator go straight.

Latin Name Required.

Briefly, the general provisions of the law were outlined by Mr. Hewitt as follows: First, each piece or each lot of nursery stock shall be labeled. Violation is a misdemeanor, punishable by a fine of not more than \$500 or a jail sentence of not more than six months, or both. Second, labels must show the name of the nursery stock and the grade. Ornamental nursery stock must have the botanical name, for which the book, "Standardized Plant Names," shall be the authority. Fruit trees may have the common name on the label. Each grade designation or statement shall conform to one of the grades mentioned in the law. For instance, coniferous trees must be labeled in 12-inch series, to six feet, and as tolerance in grading is allowed in the law, no further can be allowed. In a lot of trees, all must be within the average of the grade. Third, when nursery stock is labeled for sale, it must be as good as the label says it is.

Mr. Hewitt promised that every licensed nurseryman will get a copy of the law just as soon as possible and explained that it has been impossible to get out copies for general distribution as yet, which is why there has been some confusion in the minds of many regarding its provisions.

The questions asked of Mr. Hewitt were mostly regarding details of grading, all of which will be worked out from the provisions of the bill itself. He said that the bill will require much educa-

Liquidation Sale of Nursery Stock

To comply with an order from the court, the trees and shrubbery of the William H. Moon Company, of Morrisville, Pa., will be sold.

A wonderful opportunity is offered to interested buyers to acquire this splendid assortment of Evergreens, Shade Trees and Shrubby at bargain prices.

The nursery consists of approximately 250 acres of well grown plant material in a wide range of sizes suitable for immediate sale. Many of the newer and better varieties of stock are among the large assortment available. Most of the stock is spaced for proper development and is in a good state of cultivation.

Offers received prior to August 10th, 1937, will be considered for the entire nursery or separately for different tracts. One year will be allowed for the removal of the stock. For further particulars address:

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FOR SALE

A nursery business located in the banner county of Oklahoma; a rare opportunity. In successful operation for 39 years; well stocked; all modern equipment; buildings, stone, brick and hollow tile. Located midway between Oklahoma City and Wichita, Kan., in a city with a \$200,000 monthly pay roll, near many fertile oil fields, with the lowest natural gas rates of any city in Oklahoma and a 500-day supply of good water in surplus. Practically no competition in the nursery and florists' business. In conjunction with the above there has been maintained a wholesale and retail florists' business, with over 15,000 sq. ft. of glass, all modern, well stocked, adjoining city limits. For a company looking to the future for a place to invest money, to make money, this offer will stand a most rigid investigation. Owner wishes to retire on account of age and health. For further particulars, address Box 288, Blackwell, Okla.

FOR SALE

Due to old age, we have decided to retire from all business and to sell our nurseries. They contain up to 60 acres of good land, 30 acres planted to fruit trees, 20 acres to small fruit plants, all buildings nearly new and in good condition, city conveniences, and modern in every way. Immediate possession if wanted. More information if interested. Best to come and see the place. Location 75 miles from Chicago, Ill., on U. S. 12, Michigan. L. J. Rambo's Wholesale Nurseries, Bridgman, Mich.

FOR SALE

Nursery and greenhouse on main highway, nine miles north of Seattle, Wash., in town of Bothell; 6-room modern house; two acres of excellent soil. Good business with fine possibilities. Year-around stream running through nursery; large lily pool. Priced very reasonably. Darlington's Sunset Gardens, Box 124, Bothell, Wash.

tional effort to enforce, that extra funds have been budgeted to do the necessary work in connection with enforcement and that there should be no doubt but that deliberate violators will be prosecuted.

Result of Nurserymen's Efforts.

In discussing the bill, Mr. Wilcox reminded the audience that not one protest was filed against the passage of the bill, that it is not a new idea, but one which the industry itself has been working on for years. Grades and standards were set with the thought of having a good average, which it behooves the growers to increase and improve upon. Reliable growers will qualify under the law. The best feature of the law, he said, is the requirement to put on a botanical name. This he believes stimulates an interest in the product on the part of the purchaser. The nursery business is a scientific business. The real reason for using the Latin name is that it is good for one plant only. A common name can often apply to several plants.

In attendance at the meeting were

HELP WANTED

An established nursery and landscape firm, located in western Pennsylvania, is in immediate need of competent men for the following positions:

General Manager: Applicant must be fitted for office management, advertising, sales, overseeing nursery and greenhouse and landscape plantings.

Nursery Superintendent: Experienced in growing, transplanting, spraying and pruning.

Landscape Foremen: Two (2) thoroughly experienced landscape foremen. Must be qualified to supervise landscape plantings, rock garden and pool construction, walls, walks, etc.; also experienced in pruning, spraying and familiar with plant materials.

Write us, stating experience, age, education, references and wages expected. Address No. 64, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

HELP WANTED

First-class salesman to sell to the trade for an eastern nursery, a most complete line of nursery stock, perennials, etc. Must own car and be well posted; following in the trade desirable.

Must be live-wire, able to produce. Good opportunity for the right man.

Write full particulars, in confidence, of experience, previous employers, territory covered, etc.

Address No. 62, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

SITUATION WANTED

Landscape architect and salesman desires position with reputable firm; capable of designing, estimating, superintending and selling landscape developments of any size. Also capable of managing retail nursery. Best of references and education. Available August 15. Married man. Desires replies only from nurseries of high standing. Interview and sample landscape designs on request. Address No. 63 c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

CLASSIFIED ADVERTISING

Iris Pamula, dwarf purple, \$2.00 per 100. Elwin Gardens, Fort Angeles, Wash.

representatives from Orange, San Diego, San Bernardino, Santa Barbara—the newest unit—Ventura and Riverside counties.

Vernon Gaston, from the office of the

director of the social security act, gave an exposition of the requirements of the act as applied to nurserymen and answered questions.

A discussion of the matter of Sunday closing for Los Angeles county nurseries was closed with the decision to send out individual questionnaires to all members for their opinions. San Diego county members have already closed on Sunday, and it is a highly successful experiment.

It was reported that the governor had also signed assembly bill No. 3, which amends and strengthens the California unfair practices act. It is now said to be one of the best laws in the country against sales below cost.

Harold McFadden, chairman of the arbitration committee, reported that the committee had found most violations occurring through lack of understanding, but it now feels sufficient time has elapsed that from now on violations can be construed as deliberate. Fines as high as \$50 have been levied, and hereafter it will be the policy of the committee to feel that violations were intentional and fines will not be suspended.

CALIFORNIA GROUP'S PICNIC.

The usual large attendance marked the annual picnic of the Central California Nurserymen's Association, held at Stony Brook park, Niles Canyon, July 17. In charge of the affair were Jack McDonnell, chairman; Clarence G. Perkins, and James R. Crombie. It was reported that the convention finance committee is working on the sales of convention investment shares for the state convention of the California Nurserymen's Association, which will be held in September in Oakland. In charge is the same committee which so successfully handled the picnic.

MOVE 80-YEAR OLD YEW.

Six huge yew trees are being transferred from the Lindenwood estate in northern California to the Balboa Park nurseries of the 1939 Golden Gate international exposition. These trees were imported from Great Britain in 1857 by the late James J. Flood. Each tree with the necessary ball of earth will weigh from eighteen to twenty tons, which makes this job of tree-moving one of the most difficult on record.

PENNSYLVANIA PRODUCTION.

Pennsylvania nurseries are making heavy shipments within and without the state in response to the seasonal demand, according to the report of the state bureau of plant industry.

Soil conservation nurseries in Pennsylvania have produced 1,150,000 black locust seedlings for Indiana and several hundred thousand for New York state. The soil conservation service nursery at Hametown, York county, Pa., has shipped 300,000 coniferous seedlings.

FIRE of undetermined origin broke out at the Howard & Smith nursery, Montebello, Cal., July 1, causing damage estimated at \$25,000 and threatening nearby structures. Two minor explosions occurred during the blaze, which destroyed two automobiles, rose-spraying equipment and a new greenhouse.

INDEX TO ADVERTISERS

Aeroil Burner Co.	20	Jackson & Perkins Co.	17
American Color & Chemical Co.	20	Jewell Nursery Co.	16
American Florist Supply Co.	24	Leonard & Son, A. M.	24
Andrews Nursery	19	Loewith, Inc., Julius	19
Ariens Co.	24	Lovett, Lester C.	16
Bobbink & Atkins	16	Maloney Bros. Nursery Co.	16
Burr & Co., C. R.	16	Mathews Eggert Nursery	16
California Spray-Chemical Corp.	20	McGill & Son, A.	19
Campbell-Hausfeld Co.	24	Merck & Co., Inc.	24
Canterbury	16	Milton Nursery Co.	19
Carpenter & Co., Geo. B.	20	Moon Co., William H., Trustees	21
Chase Co., Benjamin	20	Moss Co.	16
Cottage Gardens	19	Orenco Nursery Co.	19
Curtis Nurseries	16	Pacific Coast Nursery	19
Dixie Rose Nursery	17	Peterson & Dering, Inc.	17
Eden Nurseries	18	Princeton Nurseries	16
Elwha Gardens	21	Process Color Printing Co.	20
Evergreen Nursery Co.	16	Rust Mfg. Co., John	20
Foster Nursery Co.	19	Scarff's Nurseries	19
Gardner Nurseries, Clark	18	Shenandoah Nurseries	19
Harmel Peony Co.	19	Skinner & Co., C. W.	20
Herbst Bros.	18	Southern Nursery Co.	19
Hill Nursery Co., D.	18-19	Storrs & Harrison Co.	15
Hobbs & Sons, C. M.	16	S-W Supply Co.	20
Hogansville Nurseries	19	Tabor, Rollin H.	20
Hood & Co., Inc., W. T.	19	Wayside Gardens	24
Howard-Hickory Co.	19	WhiteShowers, Inc.	20
Howard Rose Co.	17	Wilson & Co., Inc., C. E.	16

AMERICAN NURSERYMAN

The Magazine More Nurserymen Read Each Month

LOOKING FOR STOCK?

If you have difficulty in locating a source of supply for any particular size or variety of stock, the advertising columns of The American Nurseryman can help you. Insert an advertisement of "Stock Wanted" and list the sizes and varieties you seek. Those able to supply your needs will be prompt to respond.

The cost is low—only \$2.25 per column inch. Save time and effort by listing your wants in the next issue.

Carries the Largest Volume of Nursery Advertising

*Concise and Comprehensive Reference Book
for You and Your Customers*

THE GARDEN DICTIONARY

Edited by Norman Taylor

Simply written, the Garden Dictionary is easily understandable by persons unversed in botanical terminology. Yet while meeting a popular need, it does not sacrifice thoroughness of information. Common names are listed, 4400 of them, with cross references to the botanical names, under which description is given. There are given the preferred pronunciation, the origin of the generic name and the family to which it belongs. Then follows a simple non-technical description of the genus, how it is grown and propagated and the proper soil mixture. Under the name of the genus appear descriptions of each species, what type of plant it is, height, character of leaves and flowers, blooming period, country of origin and hardiness, the last indicated by reference to the zone map of this country.

Reference marks appear when descriptive words or phrases are subjects of special entries or articles on account of their significance or importance.

Special articles cover such particular information as seasonal and color gardens, descriptions of important plant families, growing conditions in each state and each Canadian province, lawns, rock gardens and other landscape features.

The book is 9x11 inches, two and one-half inches thick, bound in handsome green fabrikoid with extra thick covers and contains 896 pages.

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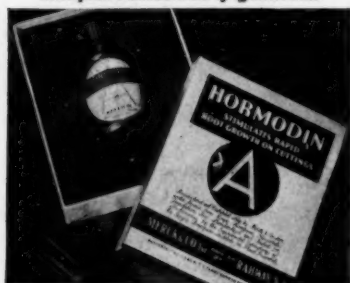


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